

Listing of the Claims

1. (currently amended) A method of adapting a speech recognition system, wherein the method comprises steps of:
- a. obtaining an identification of a speaker;
 - b. obtaining a sample of a speaker's speech during a first remote session;
 - c. recognizing the speaker's speech utilizing the speech recognition system during the first remote session;
 - d. modifying the speech recognition system ~~according to~~ by incorporating the sample into the speech recognition system thereby forming a speaker-specific modified speech recognition system;
 - e. storing a representation of the speaker-specific modified speech recognition system in association with the identification of the speaker; and
 - f. using the representation of the speaker-specific modified speech recognition system to recognize speech during a subsequent remote session with the speaker.
2. (original) The method according to claim 1 further comprising a step of cumulatively modifying the speech recognition system according to speech samples obtained during one or more remote sessions with the speaker.
3. (original) The method according to claim 1 wherein the speaker is a telephone caller.
4. (previously presented) The method according to claim 1 wherein the step of modifying the speech recognition system comprises a step of modifying an acoustic model thereby forming a speaker-specific modified acoustic model and wherein the step of storing a representation of the speaker-specific modified speech recognition system comprises a step of storing a representation of the modified acoustic model.
5. (previously presented) The method according to claim 4 wherein the representation of the speaker-specific modified acoustic model is a set of statistics which can be utilized to modify

a pre-existing acoustic model.

6. (previously presented) The method according to claim 4 wherein the representation of the speaker-specific modified acoustic model is a set of statistics which can be utilized to modify incoming acoustic speech.

7. (previously presented) The method according to claim 1 further comprising a step of utilizing the speaker-specific modified speech recognition system during the first remote session with the speaker.

8. (original) The method according to claim 1 wherein the speech recognition system is speaker-independent prior to the first remote session.

9. (original) The method according to claim 1 wherein the step of modifying the speech recognition system is performed during the first remote session.

10. (original) The method according to claim 1 wherein the step of modifying the speech recognition system is performed after termination of the first remote session.

11. (canceled)

12. (previously presented) The method according to claim 1 further comprising a step of authenticating the speaker's identification by the speaker's speech.

13. (original) The method according to claim 2 wherein the speech recognition system is speaker-independent prior to the first remote session.

14. (original) The method according to claim 2 wherein the step of modifying the speech recognition system is performed during the first remote session.

15. (original) The method according to claim 2 wherein the step of modifying the speech

recognition system is performed after termination of the first remote session.

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~~16~~ (original) The method according to claim 2 further comprising a step of authenticating the speaker's identification by the speaker's speech.

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~~17~~ (currently amended) A method of adapting a speech recognition system, wherein the method comprises steps of:

- C1
- a. obtaining an identification of a cluster of speakers;
 - b. obtaining a sample of a speaker's speech during a first remote session;
 - c. recognizing the speaker's speech utilizing the speech recognition system during the first remote session;
 - d. modifying the speech recognition system ~~according to~~ by incorporating the sample into the speech recognition system thereby forming a cluster-specific modified speech recognition system;
 - e. storing a representation of the cluster-specific modified speech recognition system in association with the identification of a cluster of speakers wherein the speaker is a member of the cluster; and
 - f. using the representation of the cluster-specific modified speech recognition system to recognize speech during a subsequent remote session with a member of the cluster of speakers.

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~~18~~ (original) The method according to claim ~~17~~ further comprising a step of cumulatively modifying the speech recognizing system according to speech samples obtained during one or more remote sessions with one or more members of the cluster of speakers.

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~~19~~ (original) The method according to claim ~~17~~ wherein the speaker is a telephone caller.

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~~20~~ (previously presented) The method according to claim ~~17~~ wherein the step of modifying the speech recognition system comprises a step of modifying an acoustic model thereby forming a cluster-specific modified acoustic model and wherein the step of storing a representation of the cluster-specific modified speech recognition system comprises a step of storing a representation

of the cluster-specific modified acoustic model.

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~~21.~~ (previously presented) The method according to claim ~~20~~¹⁹ wherein the representation of the cluster-specific modified acoustic model is a set of statistics which can be utilized to modify a pre-existing acoustic model.

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~~22.~~ (previously presented) The method according to claim ~~20~~¹⁹ wherein the representation of the cluster-specific modified acoustic model is a set of statistics which can be utilized to modify incoming acoustic speech.

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~~23.~~ (previously presented) The method according to claim ~~17~~¹⁶ further comprising a step of utilizing the cluster-specific modified speech recognition system during the first remote session with the speaker.

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~~24.~~ (original) The method according to claim ~~17~~¹⁶ wherein the speech recognition system is speaker-independent prior to the first remote session.

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~~25.~~ (original) The method according to claim ~~17~~¹⁶ wherein the step of modifying the speech recognition system is performed during the first remote session.

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~~26.~~ (original) The method according to claim ~~17~~¹⁶ wherein the step of modifying the speech recognition system is performed after termination of the first remote session.

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~~27.~~

 (canceled)

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~~28.~~ (original) The method according to claim ~~18~~¹⁷ wherein the speech recognition system is speaker-independent prior to the first remote session.

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~~29.~~ (original) The method according to claim ~~18~~¹⁷ wherein the step of modifying the speech recognition system is performed during the first remote session.

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30. (original) The method according to claim 18 wherein the step of modifying the speech recognition system is performed after termination of the first remote session.

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31. (original) The method according to claim 18 further comprising a step of authenticating the speaker's identification by the speaker's speech.

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32. (currently amended) A method of adapting a speech recognition system, wherein the method comprises steps of:

- C
- a. obtaining an identification of each of a plurality of speakers during a corresponding first remote session with each speaker;
 - b. obtaining a sample of speech made by each of the plurality of speakers during a corresponding first remote session with each speaker;
 - c. recognizing speech made by each speaker during the corresponding first remote session utilizing the speech recognition system configured to be speaker-independent;
 - d. modifying the speech recognition system ~~according to~~ by individually incorporating the sample from each speaker into the speech recognition system thereby forming a speaker-specific modified speech recognition system corresponding to each speaker;
 - e. storing a representation of the speaker-specific modified speech recognition system corresponding to each speaker in association with the identification of the corresponding speaker; and
 - f. using the representation of the speaker-specific modified speech recognition system corresponding to a speaker to recognize speech during a subsequent remote session with the speaker.

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33. (original) The method according to claim 32 further comprising a step of cumulatively modifying the speech recognition system for each speaker according to speech samples obtained during one or more remote sessions with the corresponding speaker.

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34. (original) The method according to claim 32 wherein each of the plurality of speakers is

a telephone caller.

35. (previously presented) The method according to claim 32 wherein the step of modifying the speech recognition system comprises a step of modifying an acoustic model thereby forming a speaker-specific modified acoustic model corresponding to each speaker and wherein the step of storing a representation of the modified speech recognition system comprises a step of storing a representation of the modified acoustic model corresponding to each speaker.

36. (previously presented) The method according to claim 35 wherein the representation of the speaker-specific modified acoustic model corresponding to each speaker is a set of statistics which can be utilized to modify a pre-existing acoustic model.

37. (previously presented) The method according to claim 35 wherein the representation of the speaker-specific modified acoustic model corresponding to each speaker is a set of statistics which can be utilized to modify incoming acoustic speech.

38. (previously presented) The method according to claim 32 further comprising a step of utilizing the speaker-specific modified speech recognition system corresponding to each speaker during the first remote session with the corresponding speaker.

39. (original) The method according to claim 32 wherein the step of modifying the speech recognition system for each speaker is performed during the first remote session with the corresponding speaker.

40. (original) The method according to claim 32 wherein the step of modifying the speech recognition system for each speaker is performed after termination of the first remote session with the corresponding speaker.

41. (canceled)

42. (previously presented) The method according to claim 32 further comprising a step of

authenticating each speaker's identification by the speaker's speech.

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43. (original) The method according to claim 33 wherein the step of modifying the speech recognition system for each speaker is performed during the first remote session with the corresponding speaker.

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44. (original) The method according to claim 33 wherein the step of modifying the speech recognition system for each speaker is performed after termination of the first remote session with the corresponding speaker.

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45. (original) The method according to claim 33 further comprising a step of authenticating each speaker's identification by the speaker's speech.

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46. (previously presented) The method according to claim 32 further comprising a step of deleting the representation of the speaker-specific modified speech recognition system corresponding to a speaker.

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47. (previously presented) The method according to claim 46 wherein the step of deleting the representation of the speaker-specific modified speech recognition system corresponding to a speaker is performed when a predetermined period of time has elapsed since the corresponding speaker last engaged in a remote session.

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48. (currently amended) A speech recognition system comprising:
a. an interface coupled to receive a remote session from a speaker; and
b. a processing system coupled to the interface to obtain an identification of the speaker and to recognize the speaker's speech wherein the processing system is cumulatively modified ~~according to~~ by incorporating speech samples obtained during a plurality of remote sessions with the speaker into the speech recognition system, thereby forming a speaker-specific modified processing system associated with the identification of the speaker.

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49. (original) The speech recognition system according to claim 48 wherein the speaker is a telephone caller.

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50. (previously presented) The speech recognition system according to claim 48 wherein the processing system is modified by modifying an acoustic model, thereby forming a speaker-specific acoustic model.

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51. (previously presented) The speech recognition system according to claim 50 wherein the processing system includes a memory for storing the speaker-specific acoustic model in association with the identification of the telephone caller.

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52. (previously presented) The speech recognition system according to claim 51 wherein the memory stores a plurality of speaker-specific acoustic models, one for each of a plurality of telephone callers and wherein each speaker-specific acoustic model is stored in association with the identification of the corresponding telephone caller.

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53. (previously presented) The speech recognition system according to claim 52 wherein the selected ones of the plurality of speaker-specific acoustic models are deleted when a predetermined period of time has elapsed since the corresponding speaker last engaged in a remote session with the voice recognizer.

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54. (currently amended) A method of adapting an acoustic model utilized for speech recognition, wherein the method comprises steps of:

- a. obtaining an identification of a speaker;
- b. obtaining a speech utterance from the speaker during a remote session;
- c. recognizing the speaker's speech utilizing an acoustic model during the remote session;
- d. making a determination relative to the speech utterance; and
- e. only when indicated by the determination, performing steps of:
 - i. modifying the acoustic model ~~according to~~ by incorporating the speech utterance into the acoustic model thereby forming a speaker-specific

modified acoustic model; and

- ii. storing a representation of the speaker-specific modified acoustic model in association with the identification of the speaker.

55. (original) The method according to claim 54 wherein the step of making the determination assigns a confidence level to the speech utterance.

56. (original) The method according to claim 54 wherein the step of making the determination assigns a confidence level to each of a plurality of portions of the speech utterance.

57. (previously presented) The method according to claim 54 wherein the step of making a determination determines a level of resources available for storing the representation of the speaker-specific modified acoustic model.

58. (original) The method according to claim 54 wherein the step of making a determination determines a level of processing resources available for performing the step of modifying the acoustic model.
